

**APPENDIX A****Minnesota Pollution Control Agency****3M Hazardous Waste Incinerator Permit Reissuance  
Hazardous Waste and Air Quality Permits****LIST OF COMMENT LETTERS RECEIVED**

1. Brandon & Angela Anderson, Citizen. Letter received on April 7, 2012.
2. Luke Anderson, Citizen. Letter received on April 7, 2012.
3. Angela R. Anderson, Citizen. Letter received on April 12, 2012.
4. Chad Backlund, Citizen. Letter received on April 21, 2012.
5. The Honorable Myron Baily, Mayor, City of Cottage Grove. Letter received on April 20, 2012.
6. Tamara L. Bawek, Citizen. Letter received on April 12, 2012.
7. Sharon Beckwilt, Citizen. Letter received on April 23, 2012.
8. Theresa Beissal, Citizen. Letter received on April 23, 2012.
9. Bruce Benson, Citizen. Letter received on April 23, 2012.
10. Bruce and Rachel Benson, Citizen. Letter received on April 20, 2012.
11. Ellen M. Boavold, Citizen. Letter received on April 11, 2012.
12. Nikki Bodine, Citizen. Letter received on April 20, 2012.
13. Scott Bowet, Citizen. Letter received on April 12, 2012.
14. Ellen Brovold, Citizen. Letter received on April 7, 2012.
15. Christine Brovold, Citizen. Letter received on April 23, 2012.
16. Thomas R. Budziszewski, Citizen. Letter received on April 19, 2012.
17. Ludwina Budziszewski, Citizen. Letter received on April 19, 2012.
18. Kent Byrne, Citizen. Letter received on April 20, 2012.
19. Sue Clasen, Citizen. Letter received on April 12, 2012.
20. Coalition of Concerned Cottage Grove Citizens. Letter received on April 20, 2012
21. Coalition of Concerned Cottage Grove Citizens. Petition for a Contested Case. Received on April 23, 2012
22. Jennifer Czech, Citizen. Letter received on April 7, 2012.
23. Susan Dehmlo, Citizen. Letter received on April 23, 2012.
24. Sarah Dempsey, Citizen. Letter received on April 7, 2012.
25. Sally Dempsey, Citizen. Letter received on April 7, 2012.
26. Rachel Derbis, Citizen. Letter received on April 23, 2012.
27. Genevieve Damico, US Environmental Protection Agency, Region 5 (AR-18J). Letter received on April 23, 2012, and May 4, 2012.
28. Romona L. Dohman, Commissioner, Minnesota Department of Public Safety. Letter received on April 10, 2012.
29. Carol Doro, Citizen. Letter received on April 23, 2012.
30. Kathy Dunlop, Citizen. Letter received on April 12, 2012.
31. Delos and Karen Eilers, Citizen. Letter received on April 20, 2012.
32. Kristine Erickson, Citizen. Letter received on April 23, 2012.
33. Dennis, Jennifer and Family Evista, Citizen. Letter received on April 7, 2012.
34. Crystal Farley, Citizen. Letter received on April 23, 2012.
35. Stuart M. Ferrell, Citizen. Letter received on April 23, 2012.
36. James D. Franklin, Citizen. Letter received on April 18, 2012.
37. Jon Fredericks, Citizen. Letter received on April 23, 2012.

3M Hazardous Waste Incinerator Hazardous Waste and Air Quality Permits  
Cottage Grove, Minnesota

List of Comment Letters Received on the  
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38. Gary Garner, 3M Cottage Grove Center. Letter received on April 23, 2012.
39. B.P. Genghagel, Citizen. Letter received on April 23, 2012.
40. Bruce and Karen Gengnagel, Citizen. Letter received on April 20, 2012.
41. Jessica Gingerich, Citizen. Letter received on April 16, 2012.
42. Kristen Goehler, Citizen. Letter received on April 7, 2012.
43. William Greer, Citizen. Letter received on April 23, 2012.
44. Robert Hale, Citizen. Letter received on April 9, 2012.
45. Marni Helgersen, Citizen. Letter received on April 23, 2012.
46. Sue Hilgers, Citizen. Letter received on April 12, 2012.
47. Michael and Kathy Houston, Citizen.
48. Tony Huber, Citizen. Letter received on April 19, 2012.
49. Tony and Judith Huber, Citizen. Letter received on April 20, 2012.
50. Nancy Huseby, Citizen. Letter received on April 12, 2012.
51. Teri Iverson, Citizen. Letter received on April 23, 2012.
52. David Johnson, Citizen. Letter received on April 23, 2012.
53. Stratmon Jones, Citizen. Letter received on April 23, 2012.
54. Joy Keippela, Citizen. Letter received on April 22, 2012.
55. Darin Kluck, Citizen. Letter received on April 23, 2012.
56. Donald and Barbar Kulesa, Citizen. Letter received on April 19, 2012.
57. Kim LaBo, Clean Water Action. Letter received on April 23, 2012.
58. Renee LaVidlette, Citizen. Letter received on April 23, 2012.
59. Kathy Lewandoski, Citizen. Letter received on April 23, 2012.
60. Jane C. Lonergah, Citizen. Letter received on April 20, 2012.
61. Fred and Susan Luden, Citizen. Letter received on April 20, 2012.
62. Terry Matson, Citizen. Letter received on April 23, 2012.
63. Clifford Morrell, Citizen.
64. Susan Morrell, Citizen.
65. Christina Morrell, Citizen.
66. Melissa Morrell, Citizen.
67. Angela Morrell, Citizen.
68. Mr. Morrison, Citizen. Letter received on April 23, 2012.
69. Julie Nelsen, Citizen. Letter received on April 12, 2012.
70. Jane and Jeff Nelson, Citizen. Letter received on April 23, 2012.
71. Ms. Shirley A. Nickolaus, Citizen. Letter received on April 23, 2012.
72. Paul and Marcy Nolte, Citizen. Letter received on April 20, 2012.
73. Scott & Jill Olson, Citizen. Letter received on April 7, 2012.
74. Cindy A. Olson, Citizen. Letter received on April 12, 2012.
75. Lisa Ondray, Citizen. Letter received on April 23, 2012.
76. Shawn Oswald, Citizen. Letter received on April 23, 2012.
77. Floyd and Laurie Ott, Citizen. Letter received on April 20, 2012.
78. David Pecchia, Citizen. Letter received on April 18, 2012.
79. Chris Peterson, Citizen. Letter received on April 12, 2012.
80. Teresa M. Plisek, Citizen. Letter received on April 23, 2012.
81. Brian and Marcy Quinnell, Citizen. Letter received on April 20, 2012.
82. Michelle Ramis, Citizen. Letter received on April 11, 2012.
83. Kerry Salminen, Citizen. Letter received on April 24, 2012.
84. Kerry Salminen, Citizen. Letter received on April 23, 2012.
85. Christine & Phillip Schmalz, Citizen. Letter received on April 7, 2012.

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86. Paul and Lisa Schoonover, Citizen. Letter received on April 20, 2012.
87. Cindy Sehnagl, Citizen. Letter received on April 21, 2012.
88. Natalie Seim, Citizen. Letter received on April 23, 2012.
89. Max Seim, Citizen. Letter received on April 23, 2012.
90. Pam Sherrill, Citizen. Letter received on April 23, 2012.
91. Sandra Shiely, Citizen. Letter received on April 20, 2012.
92. Sharon Shillings, Citizen. Letter received on April 20, 2012.
93. The Honorable Katie Sieben, Minnesota State Senator. Letter received on April 23, 2012.
94. Sodrina Smith, Citizen. Letter received on April 12, 2012.
95. Thomas E. Smith, Chief of Police, City of Saint Paul. Letter received on April 16, 2012.
96. James Stuart, Sheriff, Citizen. Letter received on April 24, 2012.
97. Leah Taylor, Citizen. Letter received on April 22, 2012.
98. Bets Thorkelson, Citizen. Letter received on April 20, 2012.
99. Robert J. Travers, Citizen. Letter received on April 22, 2012.
100. Mr. & Mrs. Jaylene Tronstad, Citizen. Letter received on April 7, 2012.
101. Judy Waddell, Citizen. Letter received on April 23, 2012.
102. Geeno Wade, Citizen. Letter received on April 23, 2012.
103. Toni Wilson, Citizen. Letter received on April 23, 2012.
104. Sherry Wilwert, Vice President, Citizen. Letter received on April 23, 2012.
105. Resident , Citizen. Letter received on April 22, 2012.
106. Board of Directors , Cottage Grove Area Chamber of Commerce. Letter received on April 19, 2012.
107. Resident , Citizen. Letter received on April 22, 2012.

**APPENDIX B****Minnesota Pollution Control Agency****3M Hazardous Waste Incinerator Permit Reissuance  
Hazardous Waste and Air Quality Permits****RESPONSES TO COMMENTS ON THE DRAFT PERMITS**

The Minnesota Pollution Control Agency (MPCA) received nearly a hundred comments from concerned citizens, including the Coalition of Concerned Cottage Grove Citizens (COCCGC), various law enforcement agencies, US Environmental Protection Agency (EPA), and others during the comment period from March 7, 2012, to April 23, 2012. For the approximately 100 comments from individual citizens, rather than responding to each comment individually, the MPCA has combined similar comments from these and responded to those comments at one time.

**1. Comments by citizens, general public. Comment letters received during the comment period.**

**Comment 1-1:** Commenters expressed concern that 3M is saving money by accepting non-3M hazardous waste at the expense of human health or the environment.

**Response:** Profit or cost savings have never been considered in the MPCA analysis in MPCA permitting decisions. Whether or not 3M saves money was not a consideration in how these permit applications were processed and did not have any bearing on any requirements in the permits. The proposed hazardous waste permit prohibits 3M from accepting payment or other compensation for management of wastes generated by non-3M sources, although that permit requirement is not an effort to prevent 3M from operating its hazardous waste incinerator (Facility) at a cost savings. The requirement prohibiting 3M from accepting payment or other compensation is to prevent the Facility from being a “commercial” hazardous waste incinerator, as that term is defined under federal water permitting rules.

**Comment 1-2:** Commenters expressed concern that this permit and its new limits are a step in the wrong direction.

**Response:** All emission limits in the proposed air emission permit were reduced or remain unchanged in this permit compared to the current permit. Emission limits were reduced for Total Particulate Matter, Semi-Volatile Metals (Lead and Cadmium), Low Volatile Metals (Arsenic, Beryllium and Chromium), Hydrochloric Acid and Chlorine Gas, and Mercury. These limits are based on applicable federal standards, however the mercury limit is a state-only limit that is more stringent than applicable federal standards. No emission limits have increased in the proposed air emission permit.

The proposed hazardous waste permit includes an updated Waste Analysis Plan (WAP), and an updated Human Health Risk Assessment (HHRA). Overall, the requirements in these permits will strengthen the permits, or make them more restrictive, compared to the current permits.

**Comment 1-3:** Commenters say that the MPCA is not doing its job.

**Response:** The MPCA fulfilled its obligation to draft permits that ensure compliance with all applicable state of federal statutes and rules and that protect human health and the environment. In addition, MPCA has worked for the past three years with the City of Cottage Grove and its Environmental Task Force, concerned citizens, Washington County, and EPA to incorporate many requirements into these permits, which significantly strengthen the permits to limit emissions. The WAP has been strengthened to provide more sampling and analysis of the incoming waste stream, a requirement has been added for 3M to update the 2004 HHRA, limits on the type and quantity of non-3M waste have been added, and limits on Mercury have been reduced.

**Comment 1-4:** Several commenters requested that the MPCA do a risk assessment.

**Response:** A HHRA was conducted in 2004 and the conclusion was that “routine emissions from this facility do not pose an acute health hazard to the public.” The Permittee is required in its Hazardous Waste Permit to conduct an updated HHRA using new guidance developed by EPA. The HHRA Work Plan is due to the MPCA for review and approval within 90 days after the effective date of the permit. The permit also requires that if an updated HHRA shows that potential unacceptable human health risks exist due to emissions from the 3M incinerator, the Commissioner will modify the Permit to address the risk.

**Comment 1-5:** The Facility is located less than one mile from a school.

**Response:** Some parts of the 3M Cottage Grove campus may be located within one mile of a school, however there are no schools within one mile of the Incinerator stack. Nevertheless, the HHRA evaluates maximum health risks whether they occur at the property fenceline, within one mile of the facility, or beyond.

**Comment 1-6:** Some commented that there must be a better way to manage this waste.

**Response:** Currently, incineration is an accepted method of hazardous waste treatment and is preferred to land disposal under Minnesota Statutes § 115A.02 (b).

**Comment 1-7:** Comment states that residents of Cottage Grove are inordinately affected by pollution from 3M and other sources, or that Cottage Grove is one of the highest polluted areas or has the highest cancer rates in the metropolitan area and that this project will add to this problem.

**Response:** The emissions related to the proposed permits will be unchanged from previous authorized emissions as recently as approximately 2006. Nevertheless, the MPCA has looked at available information, in preparation for the May 22, 2012, board meeting, on potential health effects related to ambient air quality in Cottage Grove to see if there is any evidence in the MPCA’s files that would support a conclusion that cumulative health impacts related to ambient air quality in Cottage Grove are significantly different compared to other areas of the state.

The MPCA has established a network of air monitoring stations to gather baseline ambient air toxics concentration data at various locations throughout the state. These baseline measurements are intended to characterize ambient air concentrations of specific air toxics in rural, urban, and suburban locations in Minnesota from all air emissions sources. The MPCA’s monitoring efforts were not designed to provide specific information on the cumulative impact of air toxics in a specific geographical area; however, the data provide information that can be used to represent background conditions in a screening level analysis evaluating cumulative impacts.

The MPCA has determined that ambient air quality is affected by emissions from three primary source categories: point sources, area sources, and mobile sources. Point sources are typically large stationary sources (e.g., power plants, refineries and this proposed permit). Area sources are also often stationary, but are generally smaller sources of emissions, such as dry cleaners, gasoline service stations, residential furnaces, and fireplaces. Mobile sources include cars and trucks used on the road and non-road sources, such as lawn and garden equipment, recreational equipment (e.g., boats and ATVs), construction equipment, aircraft, and locomotives. MPCA’s 2005 emissions inventory shows that mobile sources contributed roughly 64 percent of the total mass of air toxics emissions to the air in Minnesota, area sources contributed approximately 22 percent and point sources approximately 14 percent.

The MPCA has also summarized ambient monitoring data collected from 2005 to 2007. Data from the nine monitoring stations located in cities with intermediate population densities (Apple Valley,

Chaska, Rosemount, Newport, St Paul Park, and Duluth) were averaged to represent air concentrations in other cities with intermediate population densities that do not have monitoring stations. Cottage Grove falls in the intermediate population density range. The MPCA estimated risks from these monitoring locations by comparing measured concentrations of potentially carcinogenic pollutants to respective inhalation health benchmark concentrations and summing the resulting ratios. The average total cancer risk from the nine monitoring locations was approximately 40 in 1,000,000. This is within the EPA's excess cancer risk goal range of 1 to 100 in 1,000,000. The average chronic non-cancer risk ratios from the nine monitoring locations were summed in a similar manner. The total of the non-cancer risk ratios based on monitoring data was approximately one. MPCA's non-cancer guideline for a single facility contribution is also one.

As a further comparison, the results from intermediate population density areas representing Cottage Grove were compared with results from data collected from monitors in cities with high population density (six monitors are located in the Twin Cities metropolitan area) and with data collected in rural Minnesota. The estimated intermediate city cancer risk (4 in 100,000) for cities like Cottage Grove is lower than that estimated for more densely populated urban areas (approximately 5 in 100,000) but is higher than the rural cancer risk estimate (2 in 100,000). The average non-cancer risk ratio for intermediate population density communities (approximately one) is estimated to be the same as the non-cancer risk ratio for urban areas (also approximately one) and higher than the rural estimate (0.6).

To further determine whether there was evidence supporting the need for additional cumulative risk assessment in relation to the proposed permits, the MPCA used a statewide risk modeling screening tool (MNRisks) to compare modeled risks of nine suburban communities (Blaine, Burnsville, Cottage Grove, Crystal, Eagan, Eden Prairie, Fridley, Hugo, and Plymouth). Cottage Grove modeling results were the second lowest for both cancer and non-cancer risks based on maximal and mid-range estimates. For this reason, the MPCA finds that the evidence does not demonstrate the need for additional health risk assessment related to the contribution of this Facility to cumulative environmental effects.

Also, the Permittee is required in their Hazardous Waste permit to update its 2004 HHRA. The permit requires that if an updated HHRA shows that potential unacceptable human health risks exist due to emissions from the 3M incinerator, the Commissioner will modify the Permit to address the risk.

**Comment 1-8:** One common comment is that 3M affected the groundwater in the past and that property values have been affected. A similar comment is that the facility should not be built close to the community.

**Response:** This permit reissuance is not expected to affect water quality. The facility has been at this location since 1971. The MPCA does not evaluate property values.

**Comment 1-9:** Comment states that this facility has a poor compliance history.

**Response:** The compliance history of the facility includes two major violations prior to 1990. The MPCA executed a Stipulation agreement with 3M on December 20, 1988, for air violations observed during an April 15, 1988, inspection and subsequent visible emissions readings. The Stipulation agreement included a \$95,000.00 civil penalty. A second Stipulation agreement was executed on June 28, 1989, which included both State and Federal air and hazardous waste permit and rule violations, as a result of air emission performance tests conducted between December 15, 1988, and May 19, 1989, and a hazardous waste inspection conducted on May 30, 1989. This Stipulation agreement included a \$1,500,000.00 civil penalty.

Both of these violations were for the old incinerator prior to replacement with a new incinerator and new pollution control system in 2001. The old incinerator was replaced with the new incinerator to avert further compliance issues and to come into compliance with the new federal maximum achievable control technology (MACT) standards.

Since reissuance of the Hazardous Waste Incinerator Permit in 2005, there have been about 12 separate compliance inspections conducted by State, Federal or Washington County officials. There have been violations observed on four of these inspections dealing with storage and labeling of hazardous waste containers, manifest paperwork, contract employee training, and financial assurance. These violations were cited in a Letter of Warning, issued in 2007, and in an Administrative Penalty Order, containing an \$8,600 penalty in 2009. The MPCA did not consider these violations to be egregious or to demonstrate a pattern of noncompliance. These violations have all been corrected. Many of these issues are similar to those often observed at other hazardous waste facilities and none of these actions had the direct potential to affect human health or the environment.

**Comment 1-10:** Comment says that there are not enough inspections of the facility.

**Response:** As a permitted facility, the 3M incinerator is inspected for compliance with its permit by state or federal officials at least once every two years and by Washington County officials at least once per year. Also, state permit engineers visit the site at least once every five years during the permitting process and state and federal stack test experts are on site at least every five years during stack testing. In the MPCA's experience, this inspection schedule, coupled with recordkeeping and reporting requirements, is satisfactory to ensure compliance.

**Comment 1-11:** Comment asked what would happen if there were an emergency situation at the facility.

**Response:** Minnesota hazardous waste rules require facilities to prepare and update plans and provide training to respond to emergency situations. Part IV of the Hazardous Waste permit titled "Emergency Procedures" includes requirements for implementation of the Contingency Plan, preparedness and prevention, emergency coordinators, response to spills/leaks/releases from regulated units, response to spills from non-regulated units, notification to MPCA regarding spills/leaks/releases, containment measures, and reporting requirements. The permit and Hazardous Waste rules also require that 3M submit a copy of its Contingency Plan to all local police departments, fire departments, hospitals, and all local and state emergency response teams that may be called upon to respond in an emergency situation at the Facility. The Facility is in compliance with the facility standards governing contingency planning preparedness and prevention, emergency procedures, and arrangements with local authorities for emergencies according to Minn. R. 7045.0462 through 7045.0468.

**Comment 1-12:** Several people commented that meth waste should not be treated in the incinerator.

**Response:** Only law enforcement waste that meets the definition of "controlled substances" under 21 CFR pt. 1308 and that are within one of the permitted waste codes may be accepted at the Facility. Only a small fraction of wastes generated from law enforcement activities will qualify as controlled substances may be accepted at the 3M incinerator. Other wastes associated with meth production are not considered controlled substances and will be managed by law enforcement under a separate waste disposal system. Incineration is an accepted method of treatment of methamphetamine as well as other legal and illegal controlled substances. The MPCA has heard from Minnesota law enforcement officials that there may be controlled substance wastes which have been stockpiled while awaiting a disposal option so there may be an initial surge in waste needing processing, but even this amount is expected to be very small. This is because the permit restricts materials to only a small subset of legal or illegal drugs and pharmaceuticals.

**Comment 1-13:** Several people commented that they don't want 3M to accept non-3M waste materials.

**Response:** There is no rule or regulation currently in place that gives MPCA the authority to deny the request to accept non-3M waste materials. The facility is currently operating with actual emissions well below all of their emission limits. This change is expected to increase actual emissions only slightly compared to burning natural gas and total actual emissions are expected to be similar to what this facility was emitting in the recent past (2006) when 3M was generating more of their own high British thermal unit (BTU) waste solvents.

In conversations with citizens in the past it has been related to MPCA that there is the concern that allowing non-3M waste materials is "cracking open the door" or allowing the first step for 3M to become a commercial incinerator. Even though the Air Quality or hazardous waste rules do not distinguish between captive or commercial facilities, and regulations do not change depending on the origin of the waste, the MPCA has worked with 3M and the City of Cottage Grove to ensure that 3M cannot achieve the intent or status of a "commercial incinerator." It is reasonable to assume that a commercial facility is one that would operate for profit and would accept any type of hazardous waste that it is allowed to be incinerated by rule or regulation. A commercial facility is one that would accept payment from the generator to destroy the waste to ensure that the waste is not a future liability to the generator. The 3M hazardous waste permit prohibits 3M from accepting any payment or other compensation for non-3M wastes. Hazardous waste comes in many forms. Hazardous waste can be in the form of a gas, a solid, a pumpable or non-pumpable sludge, or several different types of liquids. The 3M hazardous waste permit only allows non-3M waste to be in the form of a liquid as they can only accept "bulk" hazardous waste. A commercial facility could accept any one of the 450 or so waste codes that are allowed to be incinerated. The 3M permit restricts 3M to accepting only five waste codes that are wastes common to the printing, coating and painting industries and are similar to the bulk of the hazardous material that 3M generates. A commercial facility could accept any amount of waste material within its permitted throughput capacity. The 3M hazardous waste permit restricts the volume of non-3M material to 400,000 million Btu's per year of hazardous waste. Permit restrictions in the hazardous Waste permit do not allow 3M to operate as a "commercial" facility.

**Comment 1-14:** Commenter ask MPCA to set emission limits at levels closer to actual emissions.

**Response:** All emission limits in the proposed air emission permit are within the regulatory requirements. Emission limits are set based on air quality thresholds for federal regulation applicability (PSD, 40 CFR § 52.21), applicable federal standards (Hazardous Waste Combustion MACT, 40 CFR Part 63, Subpart EEE), and/or state standards. 3M operates within these emission limits and has not had a history of non-compliance with these limits. 3M has accepted a lower limit for mercury at the request of the MPCA to help relieve community concerns about mercury emissions. There are several other types of limits or operating requirements in the hazardous waste and air emissions permits to ensure that the actual emissions are well below the permitted limits. Requirements for sampling and analysis, throughput limits, pollution control equipment operating parameters, recordkeeping and reporting are all in the permits to ensure that the facility is operating properly and below permitted limits.



**2. Comments by Law Enforcement Agencies including Dakota County Sheriff David D. Bellows; Anoka County Sheriff James Stuart; Minnesota Sheriffs' Association Director James D. Franklin and Minnesota Chiefs of Police Association Director David Pecchia; City of St. Paul Chief of Police Thomas Smith; and Minnesota Department of Public Safety Director Ramona Dohman.**  
**Comment letters received during the comment period.**

**Comment 2-1:** Just one of the letters is copied below because similar issues dealing with the problems disposing of controlled substances are found in all of the letters.

Dear Mr. Kvaal and Mr. Shearen,

I am writing you to support the issuance of Air Emission Permit No. 16300025-002 and Hazardous Waste Facility Permit No. MND006172969 to 3M Company for their facility located at 10746 Innovation Road, Cottage Grove, Washington County, Minnesota. I also support the provision in the permits that allows 3M to accept and dispose of controlled substances from Minnesota Law Enforcement Agencies as a public service.

The issuance of these permits, including the provision allowing 3M to accept and dispose of controlled substances will greatly assist Minnesota Law Enforcement Agencies. Currently,

Minnesota has no facility that will accept controlled substances for destruction that are not either prescription drugs or plant based material. The majority of the controlled substance cases that we hold evidence for do not fall into the prescription drug or plant based material category.

The choices we have at this time include; simply holding all of our non plant based drug material in our evidence rooms or paying to transport it out of Minnesota to be destroyed. Both of those options present significant problems to Law Enforcement Agencies. Storing drugs that are eligible to be destroyed is problematic in that it fills our evidence rooms and paying for the drugs to be transported for destruction creates an unnecessary increase to operational cost which has an impact on taxpayers. The transportation of drugs by third party for destruction also creates security issues.

Space in evidence rooms at my Office is always at a premium and I am sure that it is for many other Agencies. The property in an evidence room needs to be returned to the owner, auctioned, or destroyed, when possible, so we can continue to take in evidence from new cases.

The drugs that we hold as evidence and that are eligible for destruction have no legitimate purpose and can be destroyed as soon as they are not needed for the case. Drugs that are eligible for destruction should be destroyed in a timely manner to avoid the evidence rooms from pushing maximum capacity. It would not take a very long time for our evidence rooms to become full if we simply warehouse these drugs.

There are also several issues that come to mind when we pay to have drugs transported outside of Minnesota to have them destroyed. One issue would be the cost of transporting the drugs for destruction. There is a company that can be used to do this, however, the cost associated with this procedure is quite high. Another potential issue facing Agencies is being able to be sure that their drugs were in fact destroyed in a safe manner and that they were indeed destroyed. As a law enforcement community we work hard to remove the drugs from our streets and homes in our communities and to minimize the damage that they cause. I would hate to think that the drugs we work so hard to protect our communities from could either be disposed in an unsafe manner or diverted back onto the street to be used in another community. I would prefer that my staff witness the destruction of these drugs to ensure this.

If permits were issued to 3M, including the provision in the permits that allows 3M to accept and dispose of controlled substances from Minnesota Law Enforcement Agencies as a public service, it would greatly assist Minnesota Law Enforcement Agencies and the general public. This would provide a very cost effective and safe solution to a problem that is currently plaguing Minnesota Law Enforcement Agencies.

Please feel free to contact me if you have any questions or concerns.]

**Response:** The hazardous waste permit allows, under the conditions of the permit, controlled substance wastes, as defined in 21 CFR pt. 1308, from Minnesota law enforcement agencies that have been seized or collected as a result of law enforcement activities (“Law Enforcement Wastes”). 3M is required as a condition in the permit to develop and maintain internal procedures for 3M acceptance of Law Enforcement Waste and instructions for law enforcement agencies on how to manage these wastes. These procedures and instructions are required to be submitted to the MPCA for review and approval. The amount of controlled substance waste is expected to be on the order of 1/100<sup>th</sup> of one percent of the total of waste coming to the Facility. As a result, it is highly unlikely that controlled substance waste will affect emissions.

### **3. Comments from COCCGC, Comment letter received on April 23, 2012.**

**Comment 3-0.1:** Generally, COCCGC expressed frustration and growing impatience at the slow progress of issuance of the permits for the Facility.

**Response:** Part of the reason for delays in reissuance of the permits was the willingness of the MPCA to include various stakeholders such as COCCGC, in the permit review process prior to the public notice period. The MPCA staff attended several open meetings with the City and citizens and had several working meetings with City staff to discuss conditions of the permits. The MPCA incorporated several recommendations into the permits from the Cottage Grove Environmental Task Force, which was formed to study the incineration issue. The MPCA also worked closely with EPA for two years to address issues raised by EPA, including revisions to the WAP, and incorporating requirement to conduct an updated HHRA. The result of this additional process is a better permit that is more protective of human health and the environment.

**Comment 3-0.2:** The Air Emission Permit and Hazardous Waste Facility Permit take notice of 3M's request, in the form of an air permit amendment, to begin burning large amounts of hazardous waste, originating entirely outside 3M, in its Cottage Grove “corporate incinerator.” This request, if granted by the PCA, would reinforce the status of the incinerator as a “Commercial Hazardous Waste Combustor” subject to different and more restrictive NPDES effluent guidelines. Ironically, Clean Air Act permitting does not make the same distinction between “commercial” and other waste combustors as does NPDES permitting.

**Response:** Neither the Clean Air Act nor the Hazardous Waste rules use the term “commercial incinerator” and thus the incinerator would not be regulated any differently under the proposed permits as a result of where the waste comes from. The National Pollutant Discharge Elimination System (NPDES) rules defines a “commercial hazardous waste combustor” as one that meets certain requirements and accepts remuneration or payment for accepting the waste. MPCA included a condition in the hazardous waste permit, as recommended by the City of Cottage Grove Environmental Task Force, that restricts 3M from accepting payment for non-3M hazardous waste.

**Comment 3-0.3:** It is not clear if the permit application is an enforceable document and how this relates to the actual permit? Would you please clarify?

**Response:** The Hazardous Waste Permit Application is an enforceable part of the hazardous waste permit (See the cover of the hazardous waste permit). The application for the air emission permit is not an enforceable document.

**Comment 3-1.0:** [Information presented by the MPCA at the April 10, 2012, public meeting for supporting this permit change were not credible or beyond the scope of the MPCA.]

**Response:** Without details of the information presented at the public meeting that the commenter claims were not credible or were beyond the scope of the MPCA, the MPCA is unable to provide a specific response to this comment. MPCA staff strives to develop and present information on proposed permits that is grounded in accurate technical information that has been subject to rigorous review. MPCA staff cannot, however, control whether recipients of the information find it credible.

**Comment 3-1.1:** Volume at 3M has dropped and they no longer have enough waste to burn. We believe this is part of the normal business cycle and should not be used by the MPCA in the decision making process.

Based on the Semi Annual Deviations Report submitted to the MPCA, the 3M Cottage Grove Hazardous Waste Incinerator did have a drop in operating hours, but they are back up to historic levels:

2007 – 6956.4 hrs.  
2008 – 6849.8 hrs.  
2009 – 5622.4 hrs.  
2010 – 5712.6 hrs.  
2011 – 6700.4 hrs.

It appears the 3M Cottage Grove Hazardous Waste Incinerator had a downturn in operating hours during the economic slowdown that impacted all businesses. It should not be the responsibility of the MPCA to change a permit to allow increased pollution as a result of a general economic condition that impacted the country. The current permit allows 3M to make an acquisition anywhere in North America and bring large amounts of additional hazardous waste to the 3M Cottage Grove Hazardous Waste Incinerator. It would be more appropriate for the MPCA to realize it is the owner's responsibility, 3M Cottage Grove Hazardous Waste Incinerator, to not operate in order to conserve resources and reduce costs in economic slowdowns. This common sense business practice would save Natural Gas, eliminate the need for auxiliary fuel, and reduce pollution.

**Response:** 3M has indicated that it does not have enough high BTU waste to maintain operating temperatures in the incinerator to achieve adequate treatment of all waste and that it has had to supplement the hazardous waste with natural gas to maintain operating temperatures in the incinerator. 3M proposes to take non-3M hazardous waste rather than supplement with natural gas. The MPCA does not have jurisdiction to dictate where the waste managed and treated at the Facility comes from since neither the hazardous waste rules nor the Clean Air Act regulate the source of the hazardous waste treated in a hazardous waste incinerator as long as the incinerator has the controls necessary to treat the waste. In this case, to allay community concerns 3M has agreed to limit the amount of non-3M waste that it takes and those limits have been included in the permit.

The operating hours of the facility from year to year may be an indicator of the total amount of waste that is needed to be treated in any given year, however the operating hours do not indicate the amount of high BTU waste or natural gas required to maintain kiln temperatures.

**Comment 3-1.2:** 3M claims that they will increase profits by \$2,000,000 per year by reducing the amount of Natural Gas used at the 3M Cottage Grove Hazardous Waste Incinerator. We request to see the calculation.

The Coalition does not believe the \$2,000,000 number. There is a general lack of trust in 3M and a growing lack of trust in the MPCA. With the litany of statements increasing the savings, residents are concerned that there is another reason for this permit change that is not being communicated. In April, 2009 3M held a Public Meeting and claimed they could save \$750,000 with this proposal. In March, 2010 the MPCA representative at a community leaders meeting claimed it would save 3M \$1,000,000 with this proposal. Now 3M and MPCA are stating \$2,000,000. Between April, 2009 and today the price of Natural Gas has declined 75 percent. With all the other environmental issues and lack of trust with 3M in the surrounding communities, the numbers need validation or should not be used.

**Response:** See Response to Comment 1-1.

**Comment 3-1.3:** At the public meeting it was stated by the MPCA that the additional non-3M Fuel Grade Liquid Hazardous Waste would only result in one or two more trucks a day. We request you define fuel grade solvent as it was defined in the November, 2000 permit and add it to the current draft permit under auxiliary fuels. The 3M permit application only lists natural gas and #2 fuel oil as supplemental fuels. Specifications exist for Natural Gas and #2 Fuel Oil. If non-3M Fuel Grade Liquid Hazardous Waste is to be used as an auxiliary fuel, a specification and definition is needed.

Many residents have learned through this permit process that what is stated in a meeting does not necessarily match what is allowed in the permit. We want statements made by the MPCA to match what is in the permit so there is accountability. With the new permit limits, 400,000 million Btu per year and the worst case scenario in the air technical support document of 5,000 Btu per pound, which would equate to 80,000,000 pounds and another 2,000 tank trucks each carrying 40,000 pounds of non-3M Fuel Grade Liquid Hazardous Waste. Operating 330 days a year it is approximately six tank trucks a day.

In the first permit that covered the new incinerator, dated November of 2000, and in previous permits, Natural Gas, No. 6 Fuel Oil, and blended hazardous waste solvents meeting specifications as defined in the permit were listed as auxiliary fuels. We have been told that this will be a fuel grade liquid hazardous waste. The MPCA should again put in the current draft permit the definition for auxiliary fuel and the specification for Fuel Grade Solvent as was written in the November of 2000 permit, which was approved by the EPA and accepted by 3M.

Fuel Grade Solvent  
>12,000 BTUs/lb  
<0.5% ash  
<5% Chloride

In addition to reducing the number of tankers to 830 or 2-3 a day and get the number of tank trucks closer to what has been told to the public, it would also allow for one believable number for the impact of increased emissions to be calculated.]

**Response:** In response to this comment, and after negotiations with 3M and the leader of the COCCGC, the hazardous waste permit now includes specifications on the non-3M waste that include a minimum BTU value of 8000 Btu/lb, a maximum ash content of 15 percent by weight, a maximum chlorine content of 15 percent by weight, and the waste is further defined as bulk waste used to supplement 3M waste as an alternative to natural gas and fuel oil.

Despite the Coalition's interest in characterizing the non 3M hazardous waste as an "auxiliary fuel" or "fuel grade solvent," in fact, by definition it is hazardous waste. In addition, there are serious regulatory and legal implications to characterizing hazardous waste as fuel. The MPCA is unwilling to identify the non-3M hazardous wastes as fuel that could have other regulatory and legal consequences. The comment does not dispute that the non-3M hazardous wastes are covered by the existing hazardous waste codes that limit the wastes 3M may treat at the Facility. These codes already define the materials.

The MPCA does not have the regulatory authority to dictate the type, source, or amount of waste accepted by 3M and has restricted the amount and general parameters of the waste as voluntary limits, which were accepted by 3M. The number of trucks per day is not a regulatory requirement and is not used in any permit conditions, rather presented only as an estimate as an informational item, as citizens had expressed concerns about truck traffic.

In the presentation the MPCA was trying to provide numbers that would be best estimates or "typical" numbers for informational purposes only. Based on the new specifications and permit limits, updated calculations for trucks indicate a likely range of 2-3 trucks per day, with a worst case of 3.3 trucks per day, and updated calculations for actual emissions compared to natural gas likely resulting in increased emissions of particulate matter and VOCs less than 1.0 ton/year and 0.015 ton/yr respectively, with a worst case of 2.0 ton/year and 0.035 ton/yr respectively. The MPCA staff also toured a potential supplier of non-3M hazardous waste and was told that the BTU value of their fuel blend is above 10,500 Btu's/lb.

**Comment 3-1.4.1:** During the public meeting it was stated by the MPCA that this proposal will help meet the EPA RCRA goals and implied that the current method of disposal of the proposed non-3M Fuel Grade Liquid Hazardous Waste was not adequate. We request information that states what is deficient in the EPA regulations and the Missouri PCA regulations in regards to emissions from cement kilns.

**Response:** The MPCA staff's actual statement was "It is the MPCA's position that this proposed project embodies the intent and goals of the Minnesota and federal hazardous waste program." The point of this statement was that disposal in the 3M incinerator is considered the best available control technology and in general would be expected to provide better overall control than a cement kiln.

**Comment 3-1.4.2:** One thought expressed was that this would help conserve a scarce Natural Resource (Natural Gas is now a surplus) by burning non-3M Fuel Grade Liquid Hazardous Waste. If you look at the RCRA site <http://www.epa.gov/region2/waste/goals.htm>, waste minimization is the primary goal and it is hard to understand how by burning this waste for free creates an incentive for the waste generators to spend time or money on waste minimization.

**Response:** The following is the exact language from the public meeting presentation:

"2. Conserve energy and natural resources. The 3M proposal will conserve energy and natural resources by greatly reducing the amount of fossil fuels now being used to maintain operating temperatures needed to achieve the best available control"

The word "scarce" was not used in the presentation of Minnesota and federal hazardous waste program goals or the commentary that followed and the point of scarcity or surplus of a natural resource was not taken into account as it is not a part of the regulatory program goals. The point of the presentation was to state the EPA RCRA goals and to state how the project meets those goals. The goal is to "conserve energy and natural resources." From 3M's perspective, burning hazardous waste rather than natural gas conserves energy and natural resources. Natural gas has been portrayed as a clean fuel, and for the most part it is, but there are emissions from

combustion of natural gas and new production methods using fracking techniques have been seen to cause environmental concerns of their own.

As a waste generator, 3M is required by Minn. R. 7045.0262 and 40 CFR § 262.27 to certify that it has undertaken efforts to minimize the amount of hazardous waste it generates. Other generators of hazardous waste are required to do the same. The existence of a hazardous waste treatment facility has no bearing on the responsibility of hazardous waste generators to meet their waste minimization obligations under state and federal law.

**Comment 3-1.4.3:** During the public meeting the MPCA stated many times that they have no choice but to follow EPA Regulations. The non-3M Fuel Grade Liquid Hazardous Waste would be coming from a fuel blender located in Wisconsin and regulated by the Wisconsin PCA. This waste is currently being sent to a cement kiln in Missouri. The MPCA indicated that bringing the proposed non-3M Fuel Grade Liquid Hazardous Waste the 3M Cottage Grove Hazardous Waste Incinerator will be better than sending it to a cement kiln in Missouri. In fact the Director of the Industrial Division stated this on camera for KSTP <http://kstp.com/article/stories/S2575988.shtml>

Cement Kilns that burn hazardous waste are regulated by the EPA <http://www.epa.gov/epawaste/hazard/tsd/td/combust/finalmact/index.htm>. The MPCA should state where the EPA is deficient in the regulation and by what authority the MPCA should intervene its opinion over the Missouri PCA. The Cement Kiln in Joplin, Missouri actually produces a product where as the 3M Cottage Grove Hazardous Waste Incinerator only produces pollution. Is the cement kiln in violation of EPA or Missouri PCA rules or regulations? If the MPCA has no choice but to follow EPA regulations in the Air and RCRA permits for the 3M Cottage Grove Hazardous Waste Incinerator, why does the MPCA feel it is your responsibility to intervene and disrupt a business in Missouri that is following EPA regulations? The information on fuel blender and cement kiln was obtained under the Freedom of Information Act and can be made available.

The MPCA should focus on their mission in the state of Minnesota "The MPCA mission is to work with Minnesotans to protect, conserve and improve our environment and enhance our quality of life." Let the EPA handle the national issues and Missouri PCA handle Missouri issues. It would be interesting to know if Joplin, Missouri has the same ground water, surface water, or soil contamination that we do in the communities surrounding the 3M Cottage Grove Hazardous Waste Incinerator."

**Response:** The MPCA's perspective is that the protection of human health and the environment from the potential hazards of waste disposal. Hazardous waste is a byproduct of items we use to improve our quality of life. The intent of the 3M incinerator is to manage these wastes in a manner that protects human health and the environment to the greatest extent possible using the best available control technology. Typically these types of waste would be burned in a cement kiln which generally would not have the level of control of the 3M incinerator.

This perspective was for general informational purposes and not intended as a definitive statement of fact. It has no bearing on any requirements in the permits.

**Comment 3-1.5:** For the better part of two years the residents have been told there will be no increase in the Potential to emit. In the recent materials made available by the MPCA for the Public meeting there was a significant change in VOC based on a calculation factor change. How could the original numbers for VOCs be used for so long and be communicated to placate the public and be wrong? We would like to know how the TRI numbers are estimated for the 3M Cottage Grove Hazardous Waste Incinerator. Are the TRI numbers impacted by the change made in the table for actual facility emissions? If so, how far back will they have to go to meet the SARA 313 requirements?

There is a change between Table 1 on page 23 of the 2005 permit technical support document and Table 1 on page 2 of 10 in the 2012 permit technical support document? (Doc5) In the 3M Document and the 2005 Technical Support table both state:

Total Facility Limited Potential to emit VOC in tpy – 10.3

Total Facility Actual emissions of VOC in tpy – 3M Document – 1.1

Total Facility Actual emissions of VOC in tpy – 2005 Technical support table – 2.3

In the 2012 Technical Support table:

Total Facility Limited Potential to emit VOC in tpy – 40.2

Total Facility Actual emissions of VOC in tpy – 25.9

In January / February 2009, 3M requested a minor permit amendment application to allow use of non-3M supplemental fuel waste as an alternate fuel at the 3M Cottage Grove Hazardous Waste Incinerator. 3M states “Managing these wastes will not result in an actual or potential increase in emissions or discharges of pollutants into the environment.

3M submitted a discussion paper to the MPCA stating “there will be no increase in the potential to emit (PTE) from the 3M incinerator when accepting non-3M supplemental fuel and hazardous law enforcement agency wastes.]

**Response:** One of the goals in processing the reissuance of a permit is to correct any errors that may have been made in the past. In this instance, the MPCA permit engineer was not able to verify the origin of the 10.3 tpy limited PTE that was in the technical support document (TSD) for the 2005 permit.

Appendix 4 of the 2005 permit contains emission calculation forms submitted by the facility. Form EC-01 lists the Maximum Controlled Emissions of the incinerator stack (SV 010) as 0.13 tpy. This form did not list a value for Limited Controlled Emissions. Whereas a Limited PTE calculation would base the calculation on a permit limit (20 ppm), the maximum PTE calculation on this form was based on an emission factor using data from a CEMS (0.32 ppm). Further in this appendix there are other calculations of maximum controlled emissions from other units; SV 009 – 7.79 tpy, SV 002 – 1.05 tpy, and FS 001 – 9.24 tpy from valves, 1.75 tpy from pump seals, and 8.63 tpy from Connectors/Flanges. SV 009 and SV 002 have since been removed from the facility and are not included in the current draft permit. It is not clear from the numbers in the Appendix from the 2005 permit how the value listed in the 2005 TSD was determined.

The calculation of limited PTE for the new draft permit was based on the incinerator stack alone. The other stacks with VOC emissions have been removed, and fugitive emissions are not required to be included under the Part 70 permit program. An equation to calculate limited PTE from a permit limit given in ppm was used. This equation was a function of the permit limit, maximum flow rate of the gas, molecular weight of VOC, and the gas temperature at the stack exit. The calculation of limited PTE for the draft permit used a realistic worst case for stack temperature, and conservative values for the emission rate (permit limit vs. CEMS data) and molecular weight of VOC (weighted average molecular weight of VOCs in the gas vs. molecular weight of methane).

**Comment 3-1.5.1:** As a result of comments presented at the public informational meeting, the MPCA staff became aware that the COCCGC did not clearly understand the dioxin limit in the permit.

**Response:** The dioxin limit in the 2005 Air Emission permit contained the exact language of the interim MACT emission standards as found in 40 CFR 63.1203(a)(1)(i)-(ii), where paragraph (ii) applies to sources which operate wet particulate control devices. The dioxin limit in the 2012 draft Air

Emission permit contains the language of the replacement MACT emission standards found in 40 CFR § 63.1219(a)(ii).

The MACT interim and replacement emission standards clearly state that the higher dioxin limit applies to sources which cool the gas to below 400 degrees Celsius prior to the particulate control device, and the replacement emission standards further clarify that the higher dioxin limit also applies to sources not equipped with either a waste heat boiler or dry air pollution control system.

The effect of quickly cooling the exhaust gases results in a minimum amount of time where the exhaust gases are in the temperature range where dioxins are formed. Performance test results have confirmed that dioxin emissions are well below the emission standard.

**Comment 3-2.0:** Request that continuous emission monitors for lead and total hydrocarbons be installed.

During the public meeting it was stated that the air quality monitor located on the 3M Cottage Grove Hazardous Waste Incinerator will be able to tell if there is an increase emissions from the 3M Cottage Grove Hazardous Waste Incinerator when it starts to burn non-3M Fuel Grade Liquid Hazardous Waste. Has any statistical correlation study been done to determine if there is any relationship between that is emitted from the 3M Cottage Grove Hazardous Waste Incinerator stack and what will be recorded at the air monitor? The height of the stack, the velocity at the stack exit, and the close proximity of the air monitor would indicate that the correlation factor would be very low if any.

The Coalition believes that continuous air monitors for lead and total hydrocarbons should be added to the stack on the 3M Cottage Grove Hazardous Waste Incinerator. It is the best way to monitor compliance on a single point source. The calculations used to report lead emissions have too many variables starting at the waste generators. Emission issues will result from short term variation. A twelve hour rolling average based on theoretical calculations based on estimated concentrations marked on the drum by generators do not account for the real world short term variation in the hazardous waste incineration process, but could be shown by the use of continuous emission monitors at the stack exit.

It appears that the feedrates were adjusted from the 2005 permit levels to meet the new MACT emission limits in the 2012 permit based on the results of the most recent Comprehensive Performance Test. It appears that the feedrates for Semi volatile metals (As, Be, Cr) and Low volatile metals (Pb and Cd) were reduced at a much higher percentage 20 percent to be able to meet a 5 percent tighter emission limits. Does this mean there were compliance issues in the reported calculated emissions? A Continuous Emission Monitor should be put on the stack at the least for LVM – lead]

**Response:** Performance testing at the Facility measures the capture and removal efficiency of lead.

Based on the test results, a range of removal efficiencies is measured and the lowest (most conservative) value is used to calculate the feedrate of lead to the system to ensure compliance with the emission limit. The actual removal efficiency of lead by the control equipment is likely to be higher than the value used, and the feedrate limit is further reduced by the Facility to ensure compliance with the permit. Additionally, the Facility has operated in compliance with permitted emissions limits in the past. For these reasons, the MPCA is confident that the Facility will remain in compliance with its emission limits and that CEMS on the stack is not necessary.

The feedrate limits for Semi-Volatile Metals (SVM) and Low-Volatile Metals (LVM) are determined based on the requirements set forth in the approved performance testing protocol. There were some changes in the testing protocol for the 2009 test that were more restrictive than previous



tests. One change is that a minimum removal efficiency is needed to be used to determine feedrate limits, as opposed to an average removal efficiency used in the past, this provides for a more conservative limit. There was also a maximum scale-up value defined in the test plan which stated that values demonstrated during the test could only be relied upon within a small range. The LVM feedrate determination was affected by this, which leads to the Maximum Theoretical Emission Concentration (MTEC) calculation that demonstrates the worst case emissions will be well below the emission limit. The minimum removal efficiency measured showed an increase in removal efficiency from previous tests. So while the LVM emission limit was reduced by 5 percent and the feedrate limit was reduced by 20 percent, it was due to the restrictions in the test plan, and is not an indication of compliance issues.

**Comment 3-2.1:** The November, 2000 permit required a total hydrocarbon monitor. Yet we have been told one does not exist. Was there ever a total hydrocarbon monitor on the system? The facility was only authorized to operate for 30 hours per calendar quarter without the THC analyzer. If the THC analyzer was not in place, was the incinerator shut down? There should have been a functional THC analyzer in place in 2000 and it should still be part of this permit.

**Response:** The facility previously operated a total hydrocarbon (THC) monitor as required by the 2000 permit. 3M found that the THC monitor experienced regular, ongoing technical issues that interfered with obtaining good data. When the Hazardous Waste Combustion MACT standard went into effect, the more reliable CO monitor was used, as allowed by the MACT standard, and the THC monitor was decommissioned. Data has shown that CO emissions are a very good indicator of THC emissions, as both are a direct measure of combustion efficiency. The MPCA is confident that THC emission standards are being met on a continuous basis through the use of a CO monitor.

**Comment 3-3.0:** Clarify if there are or are not burners in the secondary combustion chamber and current permit language to reflect that determination.

The air permit states the Secondary Combustion burners have been removed and the burner inlets welded shut. The 3M application, as recent as January 25, 2012, lists a waste lance in the Secondary Combustion Chamber as a feedstream. In table A, feedrate limits, you give the Secondary Combustion Chamber a process throughput rate of 300 lbs per hour.

This appears to be a permit writing issue unless 3M is being allowed during the life of this permit the ability to open and use the Secondary Combustion Chamber to feed waste.

Is the Secondary Combustion Chamber allowed to burn hazardous waste or have all feed systems been removed and will the permit be changed to accurately reflect the status?]

**Response:** The burners in the secondary combustion chamber (SCC) have been removed as stated in the TSD for the proposed permit. Some wastes, such as pressurized gases or volatile liquids, do not require the residence time of the combustion chamber, and can be fed directly into the SCC, this requires the use of the waste lance to feed to the SCC but not the burners that have been removed. The Hazardous Waste MACT allows for waste to be fed directly into the SCC, when a performance test demonstrates that the technique meets applicable standards. This technique was included in the most recent performance test and included in the permit. The waste lance feed method provides operational flexibility for the facility, but is not used at all times. The language in the draft permit is appropriate.

**Comment 3-4.0:** We do not believe the Law Enforcement Waste can be managed as outlined in the permit without violating the Community Right to Know Act. (EPCRA) and other requirements listed in the draft permit.

In January / February 2009, 3M requested a minor permit amendment application to allow use of non-3M supplemental fuel waste as an alternate fuel at the 3M Cottage Grove Hazardous Waste Incinerator. 3M states "At the request of the MPCA, we are also asking to allow 3M to process regulated hazardous wastes from Minnesota Law Enforcement.

For regulated hazardous wastes from Minnesota Law Enforcement, will a waste stream profile exist? If only a packing slip is used, how will you meet the requirement Prior to feeding material, obtain an analysis of each feedstream that is sufficient to document compliance with the applicable federate limits in 40 CFR § 63.1209?

Any emissions as a result of burning law enforcement waste would have to be reported as part of 3M TRI emissions to meet Community Right to Know Act. How will this be accomplished if the hazardous waste is not analyzed? As mentioned in 3M WAP, the waste stream should be sampled and analyzed frequently at the beginning until some statistical confidence level can be established.

In the application it states "For all wastes managed at the incinerator, including non-3M wastes, a waste stream profile must be completed before the waste is accepted at the 3M facility." How will this happen with Law Enforcement Waste?

Will the waste stream profile be specific and unique to the generator for Minnesota Law Enforcement waste or will 3M be allowed to use generic profile with large ranges in constituents? If generic profiles are used with wide ranges how will the TRI information be calculated? If the specific generator location is not part of the Waste Stream Profile and an environmental or health issue occurs at a later date will there be a chain of custody to the generator?

3M will have its own unique profile that also identifies the generating facility. 3M stated that they want to bring in non-3M Fuel Grade Liquid Hazardous Waste from a fuel blender. Will the unique profile identify the facility where the waste was created or only the location of the fuel blender? If the specific generator location is not part of the Waste Stream Profile and an environmental or health issue occurs at a later date will there be a chain of custody to the generator?

In the event the Permittee receives a shipment of hazardous waste that the Permittee is not authorized to receive and store at the Facility. The Permittee shall reject the waste or immediately notify the MPCA... How will this work on Law Enforcement Waste since it states it can't be stored?]

**Response:** Section 6.8 of the WAP, "Wastes Exempted from Sampling Requirements" is an enforceable part of the Hazardous Waste permit, and allows for certain types of waste to be exempted from sampling requirements due to the nature and small volume of the waste. EPA WAP experts helped draft the language for the updated WAP and agreed that law enforcement controlled substance waste fit into this category because of the small volume of this type of waste that will be brought to the facility and because analysis of the waste at the facility poses a potential exposure hazard to facility employees.

The EPA WAP experts worked with 3M and MPCA for over four months to revise and update the WAP to ensure that waste is inspected, sampled and analyzed to a degree that will assure compliance with the permitted limits. Law Enforcement Controlled Substance Waste is defined in the permit as materials identified in 21 CFR pt. 1308 and is expected to be a small part of materials seized or collected by law enforcement based on this restrictive definition. The quantity of material is expected to be very small (less than 1/100<sup>th</sup> of 1 percent of the total waste) and the materials are expected to be fully destroyed in the incinerator.

The EPA and MPCA recognize that this proportionally small amount of waste will not be opened or sampled at the 3M Incinerator for safety and security reasons and both EPA and MPCA agreed to

this approach. The Hazardous Waste Permit requires 3M to: “develop and maintain internal procedures for 3M and instructions for law enforcement agencies on how to manage these wastes,” which are required to be submitted to the MPCA for review and approval. Because federal regulations require controlled substance waste to be destroyed using specific procedures, waste will be accompanied by law enforcement guards to the facility to witness the destruction and a certificate of destruction will be issued to the Law Enforcement Agency by 3M. Language from the 3M WAP regarding Law Enforcement Controlled Substance Waste is as follows; “Law enforcement wastes will be accompanied by a detailed packing slip in lieu of this analysis. Waste that does not conform to the waste stream profile and/or the acceptance specifications set forth by 3M will be rejected and returned to the Generator.” Destruction of this material in the 3M Incinerator has always been seen as a benefit to the entire Minnesota law enforcement community and a public service to the State. This service is seen as a practical solution to the system of storage and disposal that presents significant problems to the law enforcement community for safety and security reasons.

All of the waste from non-3M sources will be sampled and analyzed prior to shipment to 3M and again prior to treatment at 3M. The detailed waste profile is more important for those wastes that are not to be sampled and analyzed prior to treatment. In theory, 3M generated waste streams may not require the same level of sampling and analysis as non-3M waste streams as 3M generated the waste stream and could generate a more accurate waste stream profile. All hazardous waste is subject to the manifesting program which tracks waste from cradle to grave.

Law enforcement controlled substance waste will not be subject to a processing limit, but the volume of controlled substance waste burned is expected to be less than 1/100<sup>th</sup> of 1 percent of the Facility’s total waste, as calculated based on law enforcement estimates. Given the small of amount of controlled substance waste, the type of material incinerated, the high heat, and the quality of the control equipment used to limit emissions, the MPCA finds that there is little to no likelihood of negative environmental or human health impacts from incinerating law enforcement waste at the 3M Facility, nor will there be a measurable amount contributing to the overall Toxic Release Inventory (TRI) emissions.

All law enforcement waste will be accompanied by a law enforcement officer to oversee the destruction of the material and receive a certificate of destruction. If for some reason the material is rejected, the accompanying law enforcement officer would maintain custody of the material and remove it from the Facility.

#### **Comment 3-5.0: Emergency Response and Community Awareness**

In the event of a major incident (like the WRR fire), has an analysis been completed to show how big an area would be impacted in the Worst Case Scenario? Is there a plan for notification? With the advent of cell phones, some homes no longer have land lines. Is there a plan on how to communicate the need to evacuate a large portion of the community? What is the estimated time to complete the notification and what percentage of the target group is estimated to be contacted?

When was the last time that a shelter-in-place exercise took place in the community? Do Businesses, Residents, Schools, and Churches know how to do this? Is there any documentation?

**Response:** Part IV of the permit titled “Emergency Procedures” includes requirements for implementation of the Contingency Plan, preparedness and prevention, emergency coordinators, response to spills/leaks/releases from regulated units, response to spills from non-regulated units, notification to MPCA regarding spills/leaks/releases, containment measures, and reporting requirements. The facility is in compliance with the facility standards governing contingency

planning preparedness and prevention, emergency procedures, and arrangements with local authorities for emergencies according to Minn. R. 7045.0462 through 7045.0468.

**Comment 3-6.0: Fire Protection**

There is a concern that the permit again allows for the storage of over 3,000,000 gallons of hazardous waste. It appears that the tank farm and bulk storage systems have been recently upgraded and adequate containment provided.

We are concerned that the largest amount of storage, 2,332,000 gallons, is in drum storage. From looking at past permits, it appears that the practice of using lined storage trailers has not changed or been upgraded since the 1989 permit. The storage trailers provide the least amount of containment, trailers are parked in close proximity of each other, and probably are not considered road worthy. Should there be a sprinkler system / water canon or something to minimize risk in case of fire or explosion?]

**Response:** The incinerator tank farm has a dry pre-piped deluge sprinkler system, which is designed with a foam eductor built in. Fire trucks can hook up to the system and are able to apply foam to all tanks. In addition, 3M has installed two fixed 750 gallon per minute (gpm) monitors to hydrants adjacent to the tank farm. A house hose is located in the immediate area of the tank farm and trailer storage area which houses two portable monitors which also have a flow rate of 750 gpm.

In addition to items located at the Incinerator, 3M has four portable monitors, two which are loaded on the fire trucks, and two in other hose houses on site that can be brought to the incinerator if necessary. 3M maintains a minimum of 3,000 gallons of foam concentrate at all times. Utilizing just the Emergency Squad's equipment, 3M has the capability of flowing water at a rate of almost 10,000 gpm.

3M can also apply foam to any of the trailers via either the portable monitors or from hand lines connected to trucks. There is sufficient hose to use either the monitors or hand lines from trucks, as the situation would warrant.

**Comment 3-7.0: Job Titles and Duties**

The residents were told at the MPCA Public meeting that the 3M Cottage Grove Hazardous Waste Incinerator was one of the, if not the most regulated facility in Minnesota. It is the most regulated because it represents a high degree of hazard. If this is the case and there is only one Hazardous Waste Incinerator, why is there is not a Compliance Officer listed on the chart? Does one exist? Does it report to someone not in charge of incinerator operations? Does the MPCA have a Compliance Officer assigned to this facility? Is there someone who works to insure daily compliance and not just perform random inspections?

**Response:** It is assumed that the chart being referred to is in Part IV.D. "Emergency Procedures" of the hazardous waste permit which lists the plant emergency coordinators and is specific to potential emergency situations. The MPCA has a compliance inspector assigned to review the facility's compliance with RCRA statutes, Minnesota Rules and State-issued RCRA permit and a compliance inspector who does air compliance review. There are several MPCA staff assigned to review compliance with various aspects of the incinerator operation. These reviews are conducted routinely, at least once every other year, and are generally not announced to 3M prior to the actual inspection. The Facility is also inspected by Washington County staff at least once a year, and may be inspected by EPA officials as well. Also the Facility is required to submit data to MPCA a minimum of two times annually, and some information is submitted quarterly. This data is reviewed for compliance during each applicable reporting period (quarterly or semi-annually).

**Comment 3-8.0:** Define statement in Specific Hazardous Wastes Authorized to be Managed.

3M is prohibited from accepting payment or other compensation for management of wastes generated by non-3M sources. Would you define “other compensation?”

**Response:** This requirement to prohibit payment is a voluntary requirement agreed to by 3M to assure the public that the facility has no intention of becoming a “commercial incinerator” even though this definition is not included in hazardous waste or air regulations. The term “other compensation” was added to be more inclusive and rule out forms of compensation other than a direct payment for a service.

**Comment 3-9.0:** PFC Destruction and Kiln and Secondary Combustion Operating temperature

The minimum operating temperature for the kiln was raised from the 2005 permit level of 1,620 degrees Fahrenheit to the 2012 permit of 1,760 degrees Fahrenheit. The minimum operating temperature for the Secondary Combustion Chamber remained the same at 1,710 degrees Fahrenheit. Is it safe to assume that the temperature was left the same as the 2005 permit level because waste is no longer being fed to the Secondary Combustion Chamber? If this is so, why wasn't this requirement documented in the old permit? Are the temperatures high enough in the SCC to dispose of organic waste gas?

We will make the assumption that the temperatures listed are the actual temperatures used when the Comprehensive Performance Test was ran. Knowing that 3M has burnt PFCs in the past, present, and probably will in the future, we are astounded that the state of Minnesota can have a lawsuit pending against 3M for the destruction and loss of use of certain natural resources due to the presence of PFCs, that there is no mention of PFCs in the Air Permit. Has the MPCA preformed a test or study to determine temperature and dwell time need for the complete destruction of PFOA or PFOS by incineration? Has the MPCA done a literature search to see what other Pollution Control Agencies in other countries require for temperature to completely destroy PFCs?

The Canada Acts and Regulations for PFOS state that breakdown occurs at elevated temperatures from 760 degrees Celsius to 982 degrees Celsius. At the 982 degrees Celsius, it would require a minimum operating temperature of 1,800 degrees Fahrenheit.

The Norwegian Pollution Control Authority report that analysis for PFOA in combustion tests of treated and untreated article at 1000 degrees Celsius showed no detectable level of PFOA. At the 1000 degrees Celsius, it would require a minimum operating temperature of 1,832 degrees Fahrenheit.

Have any PFOS Fire Fighting Foams been destroyed at the 3M Cottage Grove Hazardous Waste Incinerator? The UK Environment Agency has stated – “For disposal of PFOS- containing foams and firewater, the preferred option is high temperature incineration at 1,100+ degrees Celsius, it would require a minimum operating temperature of 2,012 degrees Fahrenheit.

At this point in time with PFC contamination in the water, soil, and a state law suit, it appears to us the MPCA is negligent or not in agreement with the state law suit by not having this issue covered in the permit. Will this be addressed?]

**Response:** The minimum operating temperature for the kiln and secondary combustion chamber (SCC) were determined based on the results of the most recent performance test. The performance test verified compliance with applicable standards at the minimum temperature and maximum feedrate to the SCC, and therefore those limits remained unchanged. The minimum operating temperature of the kiln measured during the performance test was higher than the minimum in previous permits, and therefore the minimum temperature limit for the kiln was increased.

A literature search was performed by the MPCA to look at thermal destruction of PFCs and related substances. Thermal degradation studies have been performed by the University of Dayton Research Institute, many for the purposes of supporting the Hazardous Waste MACT. One study, titled "Laboratory-Scale Thermal Degradation of Perfluoro-Octanyl Sulfonate and Related Substances" by Takahiro Yamada and Philip Taylor, was prepared in response to a request from 3M to address destruction of PFCs and related substances in an incinerator. This study concluded that temperatures of 900 °C (~1650 °F) demonstrated high levels of destruction. This study also concluded that there was no quantifiable amount of PFCs and related substances generated from the combustion process. In addition, the actual day to day operating temperature of the kiln is above the limit to ensure compliance with the permit.

**Comment 3-10.0: Waste Analysis Plan**

While it is good the permit would increase the WAP to 90 percent by mass, the COCCGC has a concern that 3M is one of the great material science companies and if 3M is allowed to bring in bulk solvents in the quantities they have requested, it is feasible that the increase in bulk liquid hazardous waste poundage would make it very easy to hit 90 percent by mass with minimal analysis of other items received. With the very large number of chemicals that 3M produces and purchases that have not been evaluated under TSCA, what percentage of the total chemicals will be analyzed under the new permit? What percentage of TSCA chemicals will be analyzed? What will be the percentage of containers (or units) being analyzed under the new permit excluding bulk liquid hazardous waste shipments?]

**Response:** The Waste Analysis Plan (WAP) has been revised and updated by WAP experts from EPA to make it as tight as possible without being overly burdensome to Permittees. The WAP in use by 3M in the current permit is in compliance with EPA WAP requirements as the WAP rules are very general and very broad. The revised 3M WAP which is a part of the proposed draft Hazardous Waste Permit is much more restrictive and includes a requirement for sampling and analysis of a higher percentage and a wider variety of wastes in accordance with EPA guidance. The revised 3M WAP requires 3M to run profile verification on 90 percent of waste received by mass and to verify a minimum of 100 low volume waste streams per year.

**Comment 3-11.0: Failure to address tanker truck cleaning**

We have carefully gone through all of the documents posted by the MPCA. After our review, we cannot find any reference to Tanker Truck cleaning. We know that this takes place on site using an outside contractor, but there is no reference to location on site, containment for the process, waste disposal requirements, or reporting of fugitive emissions. We have been led to believe that 3M already handles around 500 tankers a year. What has been the amount of fugitive emissions reported for this operation? With the new permit limits, 400,000 million Btu per year and the worst case scenario in the air technical support document of 5,000 Btu per pound, which would equate to 80,000,000 pounds and another 2,000 tankers. It would appear that the tanker cleaning operation performed on site NEEDS to be included in this permit. Will it be added to the draft permit?]

**Response:** 3M stated that emissions from tanker truck cleaning used to be in their permit under fugitive emissions but had since been removed as it was considered to be an insignificant activity. This activity was inadvertently left out of the 2005 permit insignificant activity list. As a result of this comment, 3M has redone and submitted the calculations that show that tanker truck cleaning is considered an insignificant activity according to Minnesota rules. Tanker truck cleaning has been added to the list of insignificant activities in the Air Emission Permit.

**Comment 3-12.0: Liability Coverage**

“Liability coverage for sudden accidental occurrences in the amount of at least \$1,000,000 per occurrence, with an annual aggregate coverage in the amount of at least \$2,000,000.” These are the same amounts as the 1989 permit. Why have the amounts not been updated?

**Response:** The liability amounts in the 3M Hazardous Waste Permit are the amounts that are required by the MPCA hazardous waste rules. EPA has similar liability amounts in its hazardous waste regulations.

**Comment 3-13.0:** Commercial Hazardous Combustor Category – If the air permit is issued the NPDES needs to be changed.

If this draft permit is implemented the NPDES permit should immediately be changed making the 3M Cottage Grove Incinerator a commercial incinerator and subject to the discharge limits. We have reviewed the email dialogue between the MPCA and the EPA. We believe some key information was overlooked.

1. These new waste streams will not be similar to wastes being generated and burned on the 3M Cottage Grove Hazardous Waste Incinerator site or at other 3M plants generating waste being sent to the 3M Cottage Grove Hazardous Waste Incinerator.

It has been stated in e-mails that the new waste will be coming from a fuel blender (WRR) in Wisconsin. The 3M Cottage Grove site and the 3M manufacturing facilities that generate hazardous waste sent the 3M Cottage Grove Hazardous Waste Incinerator are not in these market segments.

Candidate materials for the hazardous waste fuel/waste derived fuels program include:

- Almost every residue from industrial or commercial painting operations from spent solvents to paint solids including all of the wash solvents and pot cleaners
  - Metal cleaning fluids-originally these materials were primarily solvent based mixtures and blends. Currently, the fuel blenders are being asked to evaluate for use more of the metal working and machining lubricants, coolants, cutting fluids, and the like.
  - Electronic industry solvents-since these materials tend to be the higher value chlorinated/fluorocarbon solvents, the fuels program generally sees the residues from recovery processing of these high cost materials, rather than the spent solvent itself. Oils and resins that are separated during recovery processing have excellent fuel values, and the trace metals contained become part of the cement clinker.
  - Automatic aftermarket operations-- Safety-Kleen Corp. reports serving over 400,000 customers nationwide including automotive body shops, maintenance departments and repair shops through its parts washer program. The dirty cleaning solvents picked up regularly typically get recycled with the clean solvent going back into parts washer service and residues sent for waste fuels use.
2. The only benefit listed for allowing non-3M Fuel Grade Liquid Hazardous Waste to be burned is for 3M's financial benefit. The amount of benefit 3M will receive is directly proportional to the amount non-3M Fuel Grade Liquid Hazardous Waste they burn.
- 3M is a for profit enterprise. When they receive money for product they deduct cost, report taxes, and record profits. When 3M owned National Advertising and was in the billboard market, a barter system was used and profits recorded. This proposal is similar to a barter system in that the compensation will be coming from a third party in reduced costs. In this case, 3M sales will not increase, but cost deducted will be reduced by

\$2,000,000 and an additional \$2,000,000 will be subject to taxes, and the remainder reported as profit.

3. There is no public service or product stewardship associated with the burning of non-3M Fuel Grade Liquid Hazardous Waste.
4. The generating facilities of the non-3M Fuel Grade Liquid Hazardous Waste are not under the 3M Corporate structure.

A case could be made and would be accepted by the Coalition, if the only permit change was for Law Enforcement Waste that it would not become a commercial incinerator. We believe it meets the intent of the Clean Water Act. There will be no increase in 3M sales, cost will be increased (labor, handling, equipment use etc..) and this will be reduce the amount of 3M revenue subject to taxes, and reduce the remainder that will be reported as profit.]

**Response:** Since 3M is precluded from accepting payment or other compensation or remuneration for management of waste the definition of a commercial facility would not apply to the NPDES permit. This is a voluntary permit requirement that was recommended by the City of Cottage Grove Environmental Task Force for the expressed reason to prevent the incinerator from becoming a commercial incinerator.

**Comment 3-14.0.1: Human Health Risk Assessment**

It is our position that the Human Health Risk Assessment should be completed prior to the permit being acted on. When will it be performed?

Most of the Coalition Board members have dealt with many levels of government both in our professional and private lives. One thing we would unanimously agree upon is that dealing with government is a paperwork nightmare. Evidently the MPCA has found a way to eliminate paperwork. Unfortunately, in this case we believe it is to the detriment of the citizens and not in the spirit of the Community Right to Know Act. As you will read below from a April 18, 2012, communication from the MPCA, a permit change was incorporated to bring in a new waste stream without any paperwork, analysis, or calculations on impact to the community or the residents. The sole purpose was to solve a State of Minnesota problem and reduce State expenses.]

**Response:** The language from the permit regarding timing of the HHRA is as follows: "3M shall submit to the MPCA a work plan to update the 2004 HHRA to include the dry gas deposition of mercury pathway and to address other changes to the HHRA guidance and facility-specific conditions. The work plan shall include the air-modeling and risk assessment protocol and a proposed schedule for completion of the HHRA. The work plan shall be submitted to the MPCA for review and approval within 90 days after the effective date of this Permit." The schedule for completion of the HHRA will be included in the work plan and thus subject to MPCA review and approval. The MPCA will approve a schedule that ensures timely completion of the HHRA.

Although the EPA staff reviewing the permit said that normally if a Risk Assessment has shown acceptable risk, EPA would not generally require an updated risk assessment. However, EPA recommended that 3M update the risk assessment because the guidance for completing a risk assessment had been updated since 3M performed the risk assessment in 2004 and because of the level of public concern.

**Comment 3-14.0.2:** We request that detailed analysis take place on the impact on the community, accurate estimates on changes to potential TRI emissions, and detailed analysis on potential changes to EPCRA plans be made and implemented prior permit changes.



**Response:** Section 6.8 of the WAP, which is an enforceable part of the Hazardous Waste permit, allows for certain types of waste to be exempted from sampling requirements due to the nature of the waste. EPA WAP experts helped draft the language for the updated WAP and agreed that law enforcement controlled substance waste fit into this category due to the small volume and the inherent variable nature of the waste. Though this will be a relatively small volume of waste it is assumed that this material could include drugs with a high street value or materials that could be dangerous to those who would sample that material. For those reasons EPA and MPCA agreed that Controlled Substance Wastes would fit into the category of “Wastes Exempt from Sampling Requirements,” which is allowed under the 3M WAP. It has been estimated that the amount of law enforcement waste could be less than 5,000 pounds in the first year and likely less than 1,000 pounds/year after that. Even at 5,000 pounds this is less than 1/100<sup>th</sup> of one percent of the total annual amount of material coming to the facility. This small amount would have no significant affect on emissions.

**Comment 3-14.0.3:** The Coalition of Concerned Cottage Grove Citizens believes it has rights guaranteed by the Federal Government in the Emergency Planning and Community Right-to-Know Act.

“(EPCRA) Authorized by Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning & Community Right-to-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards.”

There is a lot of concern in our community that past waste management practices that met regulatory requirements did not protect the people or the environment. As a result of the current contaminated condition of this river valley, there is a natural lack of trust with the MPCA and 3M Company.

We feel as if we are a David against two Goliaths who both have tremendously more financial, legal, and human resources than our small resident’s organization. But there is one big difference. We are passionate stakeholders who live in this community! We will continue to challenge both the MPCA and 3M at every step possible in the permit process so that our legal rights are recognized and respected. We will continue to encourage both Goliath sized organizations, 3M and the MPCA, to act in a socially responsible manner and consider the current state of this river valley and future impacts of decisions being made today.

**Response:** Comment noted for the record

#### **4. Comment of private Citizen, Natalie Seim, Comment letter received on April 23<sup>rd</sup>, 2012.**

**Comment 4-1:** I was at the meeting earlier this month, and was amazed to hear the opposition so strongly against this issue. Whether I live in St. Paul or Milwaukee, WI if you have hazardous waste, you need to either bury it or incinerate it. We have seen what happens to material that is put in our ground water.

I would much rather have a facility burn at such high rate as the 3M Incinerator does to destroy most of the hazardous waste, then to bury it. The testing seems like it is going well. I have toured this and feel very safe through their processing.

Thank you for coming out to talk about this. I only wish I had felt comfortable to speak for the process, but I think many in our community are afraid of those who are so vocal.]

**Response:** Commenter’s support of the permit is noted.

#### **5. Comment from Kim Labo, Clean Water Action, Comment letter received on April 23, 2012.**

**Comment 5-1:** Re: Proposed reissuance of a Hazardous Waste Facility permit to 3M Co.

Dear Mr. Kvaal,

On behalf of our 90,000 members in Minnesota, Clean Water Action is asking that an Environmental Impact Statement (EIS) be completed for the 3M hazardous waste facility and air emission permits for their incinerator at 10746 Innovation Road, Cottage Grove, Minnesota.

#### Environmental Impact Statement

3M Co. is requesting a modification to their air permit to increase allowed pollutant air emissions above historic emissions and incinerate new hazardous waste from the Minnesota Law Enforcement Agency and facilities from outside Minnesota. The increased levels and types of air pollutants, such as volatile organic compounds, and other pollutants, will likely have significant impacts on surrounding communities and particularly sensitive populations. An EIS needs to be completed to fully determine the possible impacts on sensitive populations due to emissions from the 3M incineration site.

#### Cumulative Impacts

We also have concerns about the potential cumulative effects borne by residents who live near the incinerator and an EIS should include an additional study of these impacts. The community of Cottage Grove already has a legacy of PFC contamination in their air, water, and soil from the 3M facility. An EIS should be performed to ensure the surrounding air quality will not deteriorate further.

We respectfully submit that an Environmental Impact Statement should be completed for the proposed modifications to the 3M Co. hazardous waste and air permit.

Sincerely,

Kim LaBo

**Response:** On May 22, 2012, the MPCA Citizens' Board voted to approve the Findings of Fact, Conclusions of Law, and Order to deny the petition requesting the preparation of an Environmental Assessment Worksheet (EAW) on the 3M Hazardous Waste Incinerator, Cottage Grove, Washington County, Minnesota. This decision completed the process for the consideration of a Petition for an EAW under the Minnesota Environmental Quality Board Rules, Minn. R. ch. 4410. Because the petition for an EAW was denied, the MPCA can now consider the proposed reissuance of the Hazardous Waste Permit and the Air Emissions Permit. Minn. Stat. S 116D.04, subd. 2b; Minn. R. 4410.3100, subp. 1.

#### **6. Comments by City of Cottage Grove Mayor, Myron Bailey, Comment letter received on April 20, 2012.**

**Comment 6-1:** Letter from City of Cottage Grove Mayor Myron Bailey to MPCA Commissioner.

Dear Mr. Aasen: The City of Cottage Grove is grateful to the Minnesota Pollution Control Agency for their efforts to minimize the environmental impacts from the 3M Corporate Incinerator operated in the City of Cottage Grove.

In particular we appreciate that the MPCA proposes to include restrictions in the 3M Corporate Incinerator's Hazardous Waste Storage and Treatment Facility Permit (the "Hazardous Waste Permit" which regulate the treatment of materials generated at non-3M sources. These provisions, which were requested by the City of Cottage Grove to address the concerns of our citizens, include the following:

- 1) 3M is prohibited from accepting payment or other compensation for management of wastes generated by non-3M sources

- 2) 3M is limited to processing a maximum of 400,000 Million BTUs per year of hazardous wastes from non-3M sources.
- 3) 3M is limited to manage bulk hazardous wastes from non-3M sources within the United States that have one of the following waste codes: D001, F001, F002, F003, F005 (Le. bulk solvent waste codes).
- 4) 3M is allowed to manage controlled substance wastes from Minnesota law enforcement agencies that have been seized or collected as a result of law enforcement activities.
- 5) 3M is required to update the Human Health Risk Assessment conducted for the incinerator to meet USEPA's revised Human Health Risk Assessment guidance documents.

We agree with MPCA's proposed improvements to the 3M Waste and Feedstream Analysis Plan, particularly those provisions that add requirements to test, monitor and evaluate all incoming wastes that were generated at non-3M facilities. We also support the Draft Air Permit's reduced allowable emission rates for several pollutants including total particulate matter, mercury, lead, cadmium, chlorine, arsenic, beryllium, and chromium.

Further, we acknowledge MPCA's efforts to help ensure that 3M complies with applicable hazardous waste and air emission regulations. MPCA regularly conducts both hazardous waste permit and air permit inspections at the 3M Corporate Incinerator and requires 3M to conduct air emission testing at the incinerator.

These efforts provide assurance to our citizens that 3M is meeting the permit requirements. To provide even greater assurance, the City requests the following of MPCA:

- 1) We request that MPCA conduct hazardous waste and air quality inspections in an "unannounced" manner. We believe that conducting unannounced inspections allows the Inspectors to see conditions that are more typical of day-to-day operations.
- 2) We understand that MPCA hazardous waste and air quality inspections occur about once every two years and that the hazardous waste inspections are often conducted concurrent with Washington County staff inspections. We request that MPCA perform inspections annually and also separate and stagger the inspections with Washington County so that inspections occur approximately every six months.
- 3) We hope that MPCA will continue its involvement with the City's ambient air quality monitoring near the 3M Cottage Grove facility. In particular, we request that MPCA analyze additional split samples collected from the monitors to help meet quality control objectives.
- 4) The Technical Support Document for the existing 3M Corporate Incinerator Air Permit shows a potential volatile organic compound (VOC) emission rate of 10.3 tons per year while the VOC potential emission rate shown in the Technical Support Document for the draft air permit is 40.2 tons per year. However, the allowable VOC emission rate from the incinerator is the same in the current and draft permit, 20 parts per million. We assume the 10.3 and 40.2 ton per year discrepancy is caused by using different calculation methods to convert the 20 ppm limit to a mass emission rate. The City requests that MPCA use a consistent calculation methodology to facilitate comparison of the potential annual emission rates from the two permits.
- 5) We understand the draft air permit requires a comprehensive emission test every 5 years and a second, less comprehensive emission test after 2.5 years. The City's Environmental Commission has recommended more frequent emission testing be conducted to confirm the facility is meeting the applicable emission limits. This testing is the best method of providing

assurance for our residents that the facility is not having a negative impact on the community. The Environmental Commission would request emission testing to be conducted annually and at a minimum, conduct emission testing for VOC's and dioxin/furans.

- 6) The City of Cottage Grove encourages the MPCA to develop a state air toxics emission regulation. As a model, the MPCA could look to Wisconsin's air toxics rule found in the Wisconsin Administrative Code, Chapter NR 445. The Wisconsin rule regulates emissions over 600 air toxics. We believe such a rule would help lower emission rates of air toxins and therefore lower the health risks to the public from these compounds.

Again, we appreciate MPCA's regulatory efforts related to the 3M Corporate Incinerator. We look forward to continuing to work with MPCA to address environmental issues important to the citizens of Cottage Grove.

**Response:** Comments from the Cottage Grove City Council are noted. Responses to the additional requests 1)-6) are below.

- 1) The MPCA conducts compliance inspections at a wide variety of facilities. When possible, agency staff tries to conduct these inspections unannounced, but in situations where it is warranted, agency staff will set up the inspection with the facility ahead of time. There are various reasons for setting up the facility inspection ahead of time, which may include safety issues, timing issues, and coordinating with facility environmental and safety staff. There are also facility permit requirements in place to determine compliance, such as facility staff inspections, recordkeeping, and monitoring, that the facility is required by the permit to comply with. MPCA also coordinates with Washington County staff to best ensure the effectiveness and efficiency of their inspections.
- 2) The MPCA is authorized by the EPA to run the hazardous waste and air quality programs in the state. With that authorization the MPCA and EPA coordinate inspections for the federal fiscal year, because there is a large number of facilities that are required to be inspected and the inspection cycle for most of these facilities is every five years for hazardous waste. 3M has been and will continue to be on a 2 year inspection cycle. The MPCA continues to utilize its resources to insure that it meets federal commitments for all facilities. The MPCA balances its hazardous waste inspector resources to ensure compliance across the entire state. The MPCA will continue to respond to any compliance issues or complaints at the facility, regardless of the routine inspection cycle.
- 3) The MPCA is available to assist as needed with future monitoring performed by the City.
- 4) This comment was also submitted by the COCCGC. See the response to Comment 3-1.5.
- 5) Dioxin/furan compounds are not fed to the kiln, so the emissions are based on products created from the combustion process. The water quench which follows the secondary combustion chamber (SCC) quickly cools the combustion gases, so that the gases spend a minimum amount of time in the temperature range that favors formation of dioxin/furans. The most recent performance test for dioxin/furans demonstrated emissions at less than 2 percent of the permitted rate. Operation of the water quench and performance test results assure compliance with this limit.

The combustion chamber and SCC are designed to destroy VOCs. Performance test results show that the most difficult to destroy compounds are destroyed at levels almost 2 orders of magnitude beyond permit limits. This also indicates that all other organic compounds will be destroyed at even greater efficiencies than the levels reported in the test. The permit limits operation of the combustion chamber and SCC to ensure compliance with VOC limits.

Compliance with these limits is ensured with a large margin of safety for both of these limits such that more frequent testing is unnecessary.

- 6) Air Toxics: The City encouraged the MPCA to develop a state air toxics regulation similar to Wisconsin's air toxics rule with the goal of lowering emission rates of air toxins and lowering health risks to the public. The MPCA has similar goals but has used different tools to achieve those goals. In fact, the MPCA spent over 5 years attempting to develop air toxics regulation. From 1988 through 1993, the Minnesota Air Toxics Technical Advisory Committee met and discussed various versions of an air toxics rule that was similar to Wisconsin's air toxics rule, NR 445, effective in 1988. In 1994, the MPCA withdrew its draft air toxics rule citing the federal efforts underway with air toxics reduction requirements in the 1990 Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAP). Since the mid-90's, EPA has promulgated a NESHAP for dozens of source categories. With EPA's focus on reducing the risk from facilities, the MPCA has adopted the following strategy to address air toxics and lower risk and emissions statewide:

- Implement the numerous federal air toxics (NESHAP) standards at facilities statewide
- Conduct a source-specific risk assessment for priority sources (new construction, those requiring an EAW)
- Monitor air toxics statewide to better understand actual, on the ground concentrations
- Use a risk screening tool developed by the MPCA to model multipathway, multipollutant human health risks from air toxics statewide. The use of this tool has helped the MPCA to identify priority air pollutants (diesel particulate, dioxin, PAHs, acrolein and PM<sub>2.5</sub>) and their primary sources to target for risk reductions.

**7. Comments by Cottage Grove Area Chamber of Commerce, Comment letter received on April 23, 2012.**

**Comment 7-1:** The Cottage Grove, Newport and St. Paul Park area is fortunate to have a diverse and solid base of businesses which make this a vibrant community in which to live, work, do business and most of all; prosper. The support of city government is key among the many factors which determine the success of any business, large or small, retail or industrial, new or well established.

As an established business owner in this area for 23+ years I feel it is important for the citizens and government officials to recognize the importance of the 3M plant that has been a valuable member of this community for most of my life. Some key points:

- 3M is a significant presence in the city of Cottage Grove area-contributes to the economic vitality, supports community efforts. Chamber, ect.
- The proposed incinerator permit is a cost effective and environmentally sound option for 3M's ongoing operations.
- 3M has worked extensively with the MPCA, EPA and Washington County for the past 3+ years to address citizen, technical and regulatory questions and concerns. At this point these 3 agencies are in agreement with the proposed permit modifications

This type of permit modification is a positive business impact which helps support the local Cottage Grove economy. As a representative of the businesses in Cottage Grove, Newport, and St. Paul Park, I ask that the cities support my effort to keep businesses competitive, which is vital to maintaining a strong presence in the community. We must be able to respond to the tough economic challenges we all face by controlling our costs to match spending to business volumes.

By enabling individual businesses to remain competitive, we all stand to benefit from a more viable business community.

I ask that you keep these aspects in mind as you continue to manage city ordinances, permits, zoning, taxation, regulations and other initiatives, especially during this difficult economic climate.

Cottage Grove Area Chamber of Commerce, Vice President

Sherry

**Response:** Commenter's support of the permits is noted.

**8. Comment from Genevieve Damico, United States Environmental Protection Agency, Region 5, Comment received in a letter received on April 23, 2012.**

**Comment 8-1:** The Technical Support Document (TSD) describes the activities allowed by this permit action (002) as a "reissuance and a major amendment to allow additional sources of non-3M hazardous waste for incineration in the kiln." The TSD discusses the change in potential emissions from the non-3M sources of waste in terms of PM and VOCs. However, there is no information in the TSD that indicates the change in potential HAP emissions associated with the increase in incineration of non-3M hazardous waste. Please provide additional information in the TSD, including emissions calculations, that demonstrates the change/increase in emissions attributed to the major amendment action, including individual and combined HAPs.

**Response:** The Destruction and Removal Efficiency (DRE) for Volatile Organic Compounds (VOC) was measured based on the DRE of a representative sample of the most difficult to destroy Principle Organic Hazardous Constituents (POHCs). The representative POHCs measured to determine the DRE consisted of 2 compounds listed as Class 1, and one compound listed as Class 2 in the Thermal Stability-Based Incinerability Ranking for Hazardous Organic Compounds, where Class 1 compounds are the most difficult. This index is referenced in EPA trial burn guidance documents, and is produced by The University of Dayton. The demonstration of destruction efficiency of compounds of a specific class is considered demonstration of the ability of the device to adequately destroy the other compounds of that class and any lower class. (Appendix D of the "Guidance on Setting Permit Conditions and Reporting Trial Burn Results, Volume II" EPA).

The non-3M waste solvents must meet the waste codes that are specified by the permit. These waste codes are also specified by the current and past permits. The chemical constituents of these waste codes will consist of Class 1 or lower compounds which have already been demonstrated to meet DREs. Any compounds which are lower than Class 1 (i.e. Class 2, 3, etc.) will be destroyed at higher DREs. The emissions of HAPs will have equivalent of better DRE than VOC, therefore the calculation for a potential increase in emissions from VOCs is a good approximation of the potential increase in emissions of HAPs, which is less than 0.05 ton/year.

**Comment 8-2:** Potential to Emit (PTE) calculations for VOCs were completed using a weighted average molecular weight based on the measured amounts of each component from a 2001 Trial Burn. Please explain how the results from this Trial Burn, which occurred over 11 years ago, will be representative of the emissions from the proposed project, especially the regulated hazardous waste from Minnesota law enforcement agencies.

**Response:** The trial burn in 2001 measured DRE of POHCs. The POHCs that were chosen to be measured during the 2001 trial burn were specified in the test plan as being representative of the most difficult to destroy organic compounds found in the hazardous waste feedstream as discussed in the response to Comment 1.

The Comprehensive Performance Test (CPT) performed in October 2009 was as required by 40 CFR § 63.1207(c)(3), and results for POHC DRE were submitted as data as allowed by 40 CFR §63.1207(c)(2) to meet the requirements of the initial CPT under the replacement standards. Future recurring CPTs will be required to test for the POHCs DRE.

The regulated hazardous waste from Minnesota Law Enforcement agencies consists of three main categories that may be and has been disposed of at other approved solid waste or hazardous waste incinerators. The wastes have been evaluated and approved by other similar facilities. Nonhazardous plant-form controlled substances such as Coca, Hashish, Iboga, Khat, Marijuana, Peyote, Salvia Divinorum, Yopo, and Magic Mushrooms may be disposed of at any of the five permitted Municipal Solid Waste (MSW) Combustors in Minnesota. Other confiscated drugs must be disposed of at a hazardous waste incineration facility ("Managing Law Enforcement-confiscated Drugs," MPCA Factsheet, Sept. 2009). These law enforcement related wastes are not Class 1 hazardous organic compounds based on the thermal stability based incineration ranking, and therefore have much higher destruction efficiencies than other chemicals.

In addition, the law enforcement wastes will be less than 0.1 percent of the feedstream accepted and destroyed at the facility. The nature of the law enforcement wastes coupled with its very small portion of the feedstream and the very high destruction rates means that there is virtually no possibility that the law enforcement waste will negatively affect emissions.

The trial burn was to demonstrate that as a highly controlled hazardous waste facility, this facility is capable of destroying the most difficult to destroy materials. Whereas by contrast, law enforcement wastes are comprised in many cases of materials that are much easier to destroy. As a result, the facility's demonstrated ability to destroy the POHCs means that the law enforcement waste will not overwhelm the control equipment and will be destroyed at higher DRE rates or result in emissions of concern.

**Comment 8-3:** The permit must include sufficient permit conditions to address Compliance Assurance Monitoring (CAM) for Emissions Units (EU) 008. According to the statement of basis, EU 008 is subject to CAM. However, no permit conditions exist in the permit that address CAM requirements. In accordance with 40 CFR §§ 64.6 through 64.9, the permit has to include the following requirements at a minimum:

- i. A description of monitoring (what is measured, how the monitoring indicators are measured such as use of continuous digital measurement or visual observation of an analog gauge for the pressure drop, the monitoring frequency, and the averaging time);
- ii. Definitions of an exceedance or excursion, and consequences (e.g., excursion triggering recordkeeping, corrective actions, and reporting obligations); and
- iii. Quality Assurance/Quality Control schedules and procedures. More information about CAM can be found in the CAM regulations in 40 CFR part 64 and <http://www.epa.gov/ttnemc01/cam.html>.

**Response:** Based on EPA's comment, the draft permit was updated to meet the requirements presented in items i.-iii. above to ensure CAM is appropriately addressed.

**Comment 8-4:** The CAM plan included as Attachment 1 to the TSD appears to be outdated. It makes a reference to the "next performance test to re-establish or change requirements", which was scheduled for October 2009. Presumably, this performance test has already occurred. The CAM plan should be updated to include indicator ranges, operating parameters, etc. that have been established in the most recent performance test. These parameters should also be reflected in the permit conditions for EU 008.

**Response:** The CAM plan was submitted with the reissuance application which was submitted in August 2009. The draft permit contains the correct indicator ranges, operating parameters, etc. that have been established in the most recent performance test, conducted in October 2009. The CAM plan attached to the TSD has been updated to match the conditions in the draft permit.

**Comment 8-5:** [P. A-22, EU 008, Replacement Rotating Kiln, contains a NO<sub>x</sub> limit of less than 190 parts per million. It appears that this condition may be incorrect or incomplete or both. Please verify the correct permit condition for NO<sub>x</sub>.]

**Response:** This is the correct permit condition for the Nitrogen Oxides (NO<sub>x</sub>) limit, and remains unchanged from the current permit. The TSD for the current permit contains the following justification for this limit, listed under section 2.7, page 8:

- [Emission Limit and/or Special Conditions: 190 ppm, uncorrected
- Factual and legal basis for above: 40 CFR § 52.21, to remain a non-major source under New Source Review.

Rough calculations show that 3M could be a major source of NO<sub>x</sub> at emission concentrations that are not unrealistically high. Given 3M's stack gas flow rate, a concentration of 190 ppm would result in 244 tons per year of Nitrogen dioxide (NO<sub>2</sub>). Therefore, a limit of 190 ppm of NO<sub>x</sub> is set to ensure that 3M's NO<sub>x</sub> emissions do not exceed 250 tons per year.

3M has requested that the limit be expressed as straight ppm, rather than "ppm dry" or "ppm corrected to 7 percent oxygen." For 3M's particular case, the request is reasonable. The purpose of the limit is to remain a minor New Source Review (NSR) source. Given their wet scrubbing system and limit on flue gas flow, uncorrected readings represent the worst case in overall tons per year emissions.]

**Comment 8-6:** EPA recommends that MPCA consider monitoring for metals, dioxins/furans, and HAPs prior to incinerating the non-3M waste. This would give the community a sense of the background emissions for the area prior to accepting the non-3M waste.

**Response:** The City of Cottage Grove retained Short Elliott Hendrickson, Inc. (SEH) to conduct ambient air monitoring at a location near the 3M Cottage Grove ("3M") facility. SEH conducted the ambient monitoring for the 12-month period from October 2010 through September, 2011. The purpose of the monitoring was to measure annual concentrations of select metals and volatile organic compounds (VOC) near the incinerator operated at the 3M facility. The monitoring was conducted prior to this permit change to determine current conditions and the monitoring is proposed to continue for an additional two years after permit issuance so that any impacts of any changes can be assessed.

SEH staff worked with 3M staff, representatives of the MPCA and the City of Cottage Grove to select a location for the monitoring. The selected site is located northwest of the incinerator stack on 3M property (inside the facility fence). The sampling and analytical methods used were selected to match ambient monitoring methods used by the MPCA at monitoring stations throughout the Twin Cities metropolitan area.

SEH concluded that monitoring showed, for the compounds monitored, the air quality in Cottage Grove meets Minnesota health benchmarks and state ambient air quality standards. Also, the first year's ambient monitoring results are generally comparable with background ambient air concentrations measured throughout the Twin Cities.

The MPCA monitoring experts also reviewed the data and concluded the following: "Overall, based on the report provided by SEH and the City of Cottage Grove, TSP and metals were



comparable to concentrations seen throughout the Twin Cities with the exception of total chromium which was measured at a concentration higher than the Twin Cities average.”

**Comment 8-7:** EPA recommends that MPCA consider granting the community's request for an Environmental Assessment Worksheet, with all supporting documentation, and possibly a full Environmental Impact Statement, including a cumulative impacts analysis.

**Response:** Minnesota’s environmental review statutes and rules do not place this 3M permitting action in a mandatory category for environmental review. The statutes and rules establish criteria for granting discretionary environmental review. Minnesota has a process for determining whether requests for environmental review should be granted.

The MPCA received a request for an EAW and an EIS from the Coalition of Cottage Grove Citizens (CCGC).

EPA recently addressed a closely related point in response to an inquiry from the Coalition of Cottage Grove Citizens (CCGC). In the attached letter dated March 5, 2012, Gary Victorine of EPA responded to a question raised by CCGC that Region V put the cumulative impact study into the MPCA workplan complete the study prior to changes in the permits. The EPA’s response is basically that the risk assessment that was conducted in 2004 was a multi-scenario, multi-pathway evaluation and that the assessment showed that routine emissions from the facility do not pose an acute health hazard to the public. The EPA letter went on to say that for the updated risk assessment, which is a requirement in the new Hazardous Waste permit, “in keeping with local concerns over cumulative impacts, the target acceptable risk and hazard levels for the risk assessment may be set lower than those associated with a single source of contamination in part to account for exposure to potential background levels of contamination and from other sources.” In other words, the required updated risk assessment may be run in such a way that background concentrations and cumulative impacts are taken into account.

**Comment 8-8:** EPA recommends that MPCA consider the community's request to require 3M to install Continuous Emissions Monitors for lead and total hydrocarbons.

**Response:** Up until about three years ago 3M operated both a THC (Total Hydrocarbons) monitor and a CO monitor in the incinerator stack. 3M found that the THC monitor experienced regular, ongoing technical issues that interfered with obtaining good data. 3M requested that they remove the THC monitor and use only the CO monitor. THC’s are products of incomplete combustion which either originate in the fuel or are formed during combustion. CO is another product of incomplete combustion. Correlations can be made which relate CO concentration to THC concentration, both of which increase as combustion efficiency decreases and both are indicators of incomplete combustion. The MACT standard has taken this into account, and requires use of whichever monitor works best with the particular system in use. Since MACT only requires one of the monitors be operated; CO and THC CEMS are redundant; and CO and THC correlate with each other, MPCA allowed 3M to discontinue operation of the THC monitor. 3M continues to operate the CO monitor. Given past experience with the THC monitor on this system, requiring re-installation would not yield accurate, useful data.

Regarding a lead monitor, generally materials containing higher concentrations of lead are not accepted for destruction in the incinerator. 3M has no incentive to burn lead in the incinerator and the bulk shipments of non-3M waste allowed by the new permit will be tested for lead to make sure that the waste will not have any more lead than the materials they are currently burning.

The replacement MACT standards that went into effect October 14, 2008, have limited the maximum yearly emissions of lead to 249 lb/yr. The average lead emissions from the incinerator were

approximately 127 lbs/year for 2001 to 2007 and for 2008 to 2010 annual lead emissions averaged 29 lbs/year. Lead emissions are well below the limit and the trend has been lower lead emissions.

The new NAAQS for lead is 0.15 µg/m<sup>3</sup>. The MPCA ran a conservative screening model using the RASS Spreadsheet, using the maximum potential emissions and a conservative distance to the closest property boundary. It predicts the lead concentrations will be less than 1/40<sup>th</sup> of the new standard, measured near the boundary of the facility.

Also, EPA already addressed a request concerning the possible installation of emissions monitors for lead and TCH and the accuracy of actual emissions. In question number 3 in the attached letter from Gary Victorine of EPA, CCGC questioned the accuracy of the relation of analysis through the Waste Analysis Plan (WAP) and actual emissions and requested that emissions monitors be required for lead and THC. Over a period of several months in 2011 and 2012 EPA and MPCA did extensive work on the WAP making it much more robust. The EPA letter summarizes the changes made that should ensure that sampling and analysis conducted under the new WAP will provide a more accurate estimate of actual emissions further negating the need for monitors in the stack.

The CCGC also specifically asks about CO exceedences caused by “hot drums” and asks if these should have triggered installation of a THC monitor on the stack in question number 8 in the attached letter. EPA replies to question number 8 that there has been a reduction in both the number of CO exceedences and in those caused by hot drums due to corrective actions taken by 3M. EPA does not indicate that a THC monitor is warranted.

In summary, in coordination with EPA, the MPCA has done extensive work over the past three years to address the very issues presented in your letter of April 23, 2012. Throughout the course of this work, EPA gave every indication that MPCA’s activities were satisfactory to address the issues. We would appreciate affirmation that our work resolves any questions you may have had.

**EPA Response:** The comments 8-1 through 8-8 and responses were submitted by EPA, and responded to by MPCA. Based on the MPCA response to EPA comments, Genevieve Damico of EPA sent the following letter dated May 4, 2012:

Dear Mr. Pak:

Thank you for the opportunity to review your response to our comments on the draft/proposed Title V permit renewal and major amendment for 3M’s Corporate Incinerator, located in Cottage Grove, Minnesota (permit number 16300025-002). As you know, the U.S. Environmental Protection Agency provided comments and recommendations on the draft/proposed permit in an April 23, 2012 letter to the Minnesota Pollution Control Agency. We have reviewed your response to our comments and have no further concerns. We also would like to emphasize that items 6-8 from the April 23, 2012 letter were put forth purely as recommendations and should not be construed as being regulatory requirements. We appreciate the opportunity to work with your staff to address our concerns.

Please feel free to contact me or Jennifer Darrow, of my staff, at 312-866-6315 if you have any further questions.